



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,037	01/28/2004	Charles W. Finkl	FINKL162CIPD2	4800

7590 08/24/2005

James G. Staples  
A. Finkl & Sons Co.  
2011 North Southport Avenue  
Chicago, IL 60614

EXAMINER
----------

KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/767,037	FINKL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Scott Kastler	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa in view of Butler et al. Nishikawa teaches that it was known in the art at the time the invention was made to employ electric heating from infrared heaters and associated control means in the form of halogen lamps (including short wave length tungsten halogen lamps) to selectively harden portions of a workpiece while employing means for confining the heat from the lamps to the portion to be heated (see col. 4 line 50 to col. 7 line 5 for example) thereby showing all aspects of the above claims except the arrangement of the heating elements as adjacent parallel runs of heating elements in a common flat plane, or the use of a support structure to hold the workpiece to be treated. Butler et al teaches that it was known in the art to employ a plurality of heating elements within a shielding “structural heat blocking members” in a parallel arrangement, where the heating elements are arranged at equal distances to a workpiece location to be treated, where if the workpiece was to be planar than the heating elements would be arranged in a common flat plane; further, since no new or unexpected result has been shown to arise from the use of heating members arranged in a common flat plane as opposed to heating members arranged in the manner required by Butler et al (where the heating elements are arranged parallel at an equal distance from the section of the workpiece to be treated, which includes arrangement in a common flat plane where the surface to be treated is a

Art Unit: 1742

flat plane) and it has been well settled that where no new or unexpected result has been shown to arise therefrom, motivation to alter the shape or configuration of a component shown by the prior art would have been a modification obvious to one of ordinary skill in the art at the time the invention was made (see MPEP 2144.04 IV B. In the instant case, it would have been a modification obvious to one of ordinary skill in the art at the time the invention was made to alter the shape of the heating element configuration of Butler et al to any other desired shape where the heating elements are in parallel rows, including arrangement in a common flat plane, in order to arrange the heating elements at an equal distance from the workpiece to be treated. Roth teaches that it was known in the art at the time the invention was made to employ a workpiece support member (5) in order to hold the workpiece to be treated stationary during heat treatment with an electric heating means in order to more efficiently heat treat the workpiece. Because Butler et al specifically states that heater lamps of the type disclosed by Nishikawa are appropriate for use in the apparatus disclosed by Butler et al, and Butler et al would also desire secure support of the workpiece in a stationary manner in order to allow for more efficient heat treatment, motivation to employ the heater system of Nishikawa, as well as the support system of Roth, for secure support of the workpiece to be treated, in the apparatus disclosed by Butler et al, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basinger in view of Butler et al and Roth. Basinger teaches an apparatus (10) for locally heating a workpiece including parallel runs of induction heating elements (20) in a common plane, where the heating elements are surrounded by structural heat blocking members (22) at all locations except where

Art Unit: 1742

the heating elements are employed to heat the workpiece, thereby showing all aspects of the above claims except the use of any specific materials, the deployment of the heating members in a common flat plane, or the use of a support member. As applied to claim 1 above, Butler et al in view of Roth teach that the use of both support members (Roth) and the deployment of the heating members in any specific configuration would have been modifications obvious to one of ordinary skill in the electric heat treating art at the time the invention was made. Butler et al further teaches, at col. 3, lines 40-45 for example, that it was well known in the art at the time the invention was made to employ ceramic materials as shield materials for the purpose of confining heat from heating members where the shield materials surround the heating members. Because the shield (22) of Basinger must be made of some unspecified material, and Butler et al teaches that ceramics are a desired material for the purpose of forming shield members of the type employed by Basinger, motivation to employ ceramic materials, as taught by Butler et al, for forming the shield members (22) of Basinger, as well as use of a support member as taught by Roth and heating element arrangements suggested by Butler et al as applied to claim 1 above, would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4 and 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1742

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler  
Primary Examiner  
Art Unit 1742

sk